

Feeding

In free range farming, the food supply is based upon native vegetation of herbaceous plants, pasture legumes, a great variety of graminaceae and some leguminosae. Other ligneous shrubs of importance are *Prosopis juliflora*, *Leucaena* and *Acacia*. The goats are usually left on seasonal pasture under a free grazing regime, except during the growing season when owners pay more attention to avoiding crop damage. The length of the rope determines the grazing area, which is on average 5–25 ft long (Bien-Aimé, 1991). Natural pastures account for the basis of the food supply. After harvesting, the animals feed on crop residue, corn and sorghum stubbles and bean and potato stalks. Natural pastures may constitute a biomass of lesser quality, highly lignified and low in digestible proteins. They remain with grasses that grow on the side of roads and food waste near houses the the major available feed resource along with excess mangos and avocados. It is noted that Mineral blocks or any other supplement are rarely made available to goats.

Health care

From a hygiene viewpoint preventive care is mostly nonexistent unless periodical campaigns organized by the Ministry of Agriculture, against Anthrax, or deworming shots against non specific gastrointestinal parasites are done. The main pathologies are diarrhoea related to major parasite infestations. Intestinal infestations caused by lung worms are predominant and to a lesser extent, those caused by *Eimeria*. A survey conducted in 1990 indicated a notable polyparasitism with a prevalence of nematodes (in 80% of the cases due to lung worm) in all areas, and variable whip worms infestation (5% to 35%) in dry areas.

Purpose of production

A predominance of local goat breeding in extensive systems is reported. Most are without inputs for meat production. In addition some aid projects have led, over a period of 20 years to the sporadic introduction of "enhanced" breeds, sometimes for milking production purposes (Alpine), but generally to enhance the local carcasses (Boer, Nubienne) (Gaspard, 1986). These animals and their crossed offspring represent 5% of the field. Processing of the skin remains a leather craft activity.

Trends and Prospects

Today goat farming in Haiti is mainly dedicated to meat consumption under traditional farming systems. Despite an increased tendency to meet the specific demands of the Dominican Republic market no sign of enhanced productivity has been observed. This will probably only be achieved through the increased female productivity and a better zoosanitary support. Characterizing the local "creole" breed remains to be done. Preserving the "Haitian Creole" biogenetical resource does not exclude the implementation of niche enterprises that favours cross-breeding with stronger breeds to enhance the carcasses.

References

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A study of the male agouti's (*Dasyprocta leporina*) reproduction system: a Neo-tropical animal with the potential for sustainable production

William Mollineau[†], Andrew O. Adogwa and Gary W. Garcia

Open Tropical Forage-Animal Production Laboratory, Department of Food Production, Faculty of Science and Agriculture, The University of the West Indies, St. Augustine, Trinidad & Tobago

Introduction

This study addressed four questions: (1) Are there any morphologies specific to the male agouti's (*Dasyprocta leporina*) reproductive system? (2) Can semen be collected from the agouti by electro-ejaculation? (3) Can the agouti's semen be extended and (4) stored?

[†] E-mail: wmollineau@yahoo.com

Material & methods

Male agoutis were dissected for macro-anatomy description and tissue samples taken for hematoxylin-eosin histological analysis. Various electrical stimulations were applied from an electro-ejaculator to identify a protocol for electro-ejaculation of the agouti. Three (3) available substances (UHT Milk, pasteurized and un-pasteurized coconut water) were evaluated as semen extenders for extension and storage of the agouti's semen.

Results/Discussion

The male agouti had a U-shaped penis and a paired lateral penile cartilage which were only identified in *D. leporina*.

Electro-ejaculation success improved from 30% (initially) to 75% when xylazine (40 mg/kg live body-weight) was used as an anesthetic. This latter success was attributed to the muscle relaxing properties of xylazine. Mean spermatozoa concentration, motility and percentage abnormalities were $106.7 \pm 31.1 \times 10^6$ spermatozoa/mL, $50.44 \pm 4.44\%$, and $35.14 \pm 2.76\%$, respectively during the development of the electro-ejaculation protocol. However, in later trials the mean spermatozoa concentration improved to 431 ± 180 and $306.6 \pm 64.9 \times 10^6$ spermatozoa/mL during two continuous experiments. Eleven (11) spermatozoa morphologies were identified. The majority (68.5%) of spermatozoa showed no known defects and was considered normal. Mean lengths for head, mid piece, tail and total length of the agouti spermatozoa were $5.23 \pm 0.04 \mu\text{m}$, $5.18 \pm 0.08 \mu\text{m}$, $37.52 \pm 0.24 \mu\text{m}$ and $47.96 \pm 0.25 \mu\text{m}$, respectively. There was a direct relationship between fructose concentration in agouti ejaculate and abnormal spermatozoa.

Agouti ejaculates extended with UHT milk, diluted to a spermatozoa concentration of 100×10^6 spermatozoa/mL and filled in 0.25 mL vials produced the best results ($P < 0.05$), for motility % after storage at 5°C for five days.

Conclusion

It was concluded that the survival of spermatozoa in a given volume (0.25 mL) of extended agouti semen stored at 5°C is dependant on the stored spermatozoa concentration.

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The Moka cattle, an element of the Reunion Island heritage to preserve

Olivia Fontaine^{1†}, Jean-Philippe Choisis² and Michel Naves³

¹CIRAD, UR 18, 97410 Saint-Pierre, France; ²INRA UMR 1201 Dynafor, F- 31326 Castanet-Tolosan, France; ³INRA UR143 URZ, 97170 Petit Bourg, France

Introduction

To satisfy the needs in animal pulling, in particular for cane sugar transport, cattle were introduced onto the Reunion Island during the 18th and 19th centuries. The animals originated from Madagascar and West Africa. With the mechanization of transport, the use of draught animals was gradually reduced while choices were made to develop a meat production sector with "improved" breeds imported from the mother country. Consequently, the local "Moka" population became residual. Neither conservation action nor recognition has been undertaken for this population which does not benefit from an official status, although rare and at risk. Some breeders preserving this heritage, created an association in 2006 whose general purpose is to preserve and promote the breed, and to defend the interests of Moka breeders. In order to help the breeders in their initiative, we undertook a first characterization study of the Moka breed.

Material and methods

Because of the lack of data on this population, we took action in order to complete a recognition file. Firstly, we explored bibliographical sources and collected information among experts in order (I) to provide information on the history, the situation, uses, animal performance and (II) to carry out an exhaustive inventory of the breeders owning animals from this population. Secondly, eleven identified herds were surveyed to characterize their structure and the main breeding operations. These site visits enabled us to locate animals described as the Moka type according to the view of breeders. Thirty-three animals were the subject of a phenotypical description, linear measurements (height at withers, rump width, thoracic perimeter) and weight. The genetic characterization of the breed was also carried out. Blood samples were taken from 38 animals, between November 2005 and March 2006 for analysis of the 16 microsatellite markers used for parentage testing in France. Different datasets were constituted and statistically analysed according to the type of data.

Results

The breeding practices of the surveyed herds differed little between farms. Moka herds are bred on very poor savannahs, almost without supplementation. They are kept for their hardiness, their capacity to withstand very strong seasonal variations in forage availability. These

† E-mail: olivia.fontaine@cirad.fr